

Abstract

The invention relates to a series of novel ester containing phosphobetaine compounds, which are exceptional surface active agents that provide outstanding foam and are very mild to the hair and skin, in addition because of the presence of the ester linkage these materials are not persistent in the aquatic environment. This lack of persistence in the aquatic environment makes these materials greener and environmentally friendly than other non-ester containing compounds. The compounds, because they contain a pendant ionizable phosphate group and a quaternary amine compound are amphoteric surfactants that is they contain both a positive and negative charge in the same molecule. This combination of properties makes these polymers ideally suited for use in personal care applications.